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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,667	07/07/2006	Takatsugu Yamada	XA-10589	4216

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MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
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MCLEAN, VA 22102-3833

EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
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3679

NOTIFICATION DATE	DELIVERY MODE
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08/18/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/585,667	Applicant(s) YAMADA ET AL.	
	Examiner Greg Binda	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Drawings

1. The drawings are objected to because reference numerals 5+ are used to identify features in Fig. 2 and modifications of those features in Figs. 3+. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance

2. Figure 16 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

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Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "high" in claim 1 is a relative term which renders the claim indefinite. The term "high" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1-3 & 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffmann, US 754,066. Fig. 1 shows a telescopic shaft that could be used for vehicle steering assembled into a steering shaft for a vehicle, the telescopic shaft comprising: a female shaft 1 and a male shaft 3 that are so fitted to each other as to be unable to relatively rotate but to be slidable, the female shaft having its end portion attached with a seal member 12, 13 for preventing rain water etc from entering inside a fitting portion 6 between the female shaft and the male shaft by sealing this fitting portion,

the seal member being constructed of a high-rigidity support member 12 and an elastic member (see “felt or other washer” at page 1, lines 60 & 61),

wherein an intermediate portion of the support member is bent, one end of said support member is a fixed portion fixed to the end portion of said female shaft, and at least a front end portion 13 on the other side of said support member is a fitted portion to which said elastic member is fitted so as to be in contact with an outer peripheral surface of said male shaft with frictional force.

8. Claims 1-3 & 8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 63-89432. Fig. 1 shows a telescopic shaft that could be used for vehicle steering assembled into a steering shaft for a vehicle, the telescopic shaft comprising: a female shaft 8 and a male shaft 2 that are so fitted to each other as to be unable to relatively rotate but to be slidable, the female shaft having its end portion attached with a seal member 15, 16 for preventing rain water etc from entering inside a fitting portion between the female shaft and the male shaft by sealing this fitting portion,

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the seal member being constructed of a high-rigidity support member 15 and an elastic member 16,

wherein an intermediate portion of the support member is bent, one end of said support member is a fixed portion fixed to the end portion of said female shaft, and at least a front end portion on the other side of said support member is a fitted portion to which said elastic member is fitted so as to be in contact with an outer peripheral surface of said male shaft with frictional force.

9. Claims 1-4, 6-8, 10 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Pendleton, WO 80/02315.

Claim 1. Fig. 2 shows a telescopic shaft that could be used for vehicle steering assembled into a steering shaft for a vehicle, the telescopic shaft comprising: a female shaft 32 and a male shaft 30 that are so fitted to each other as to be unable to relatively rotate but to be slidable (see “reciprocating” at page 5, line 13), the female shaft having its end portion attached with a seal member 10 for preventing rain water etc from entering inside a fitting portion 12 between the female shaft and the male shaft by sealing this fitting portion,

the seal member being constructed of a high-rigidity support member 12 and an elastic member 14,

wherein an intermediate portion of the support member is bent, one end of said support member is a fixed portion fixed to the end portion of said female shaft, and at least a front end

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portion on the other side of said support member is a fitted portion to which said elastic member is fitted so as to be in contact with an outer peripheral surface of said male shaft with frictional force.

Claim 2. Pendleton discloses at page 4, line 16 that the support member 12 is metal.

Claims 3 & 8. Fig. 2 shows that an end of the fitted portion of said support member 12 and the outer peripheral surface of said male shaft 30 are substantially proximal without being brought into contact with each other.

Claim 4. Figs. 2 & 3 show the outer peripheral surface of said male shaft 30 is provided with a worked portion 28 for sliding worked so as to be fitted relatively unrotatably but slidably with respect to an inner peripheral surface of said female shaft 32, and

an end portion of said fitted portion of said support member 12 has its inside diameter (see “I. D. of 1.053 inch” at page 7, line 25) that is set smaller than an outside diameter (see “O.D. of 1.372 inch” at page 7, line 23) of said worked portion for sliding.

Claims 6 & 10. Figs. 1 & 3 show the elastic member 14 has a grease reservoir 44.

Claims 7 & 11. Fig. 5 shows the seal ember 60 comprising a second elastic member 62 that is interposed between the end portion of the fixed portion of the support member 66 and the female shaft 32.

10. Claims 1-4, 6, 8 & 10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of Shurts, US 3,248,900 and Mangiavacchi, EP 0 440 518.

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11. Claims 1-4 & 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Freeman, US 3,123,990.

12. Claims 1-3 & 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of Asher, US 3,365,914 and Chocholek et al, US 3,279,218 (Chocholek).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5 & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pendleton in view of Haines, US 3,400,558. Pendleton shows a telescopic shaft comprising every limitation of the claims except a solid lubricating film on a contact portion. Haines teaches providing a telescopic shaft 10 with a solid lubricating film 22 on a contact portion in order to provide the contact portion which exhibits low friction and high resistance to wear (col. 2, lines 15 & 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the telescopic shaft of Pendleton by providing a contact portion with a solid lubricating film in order to provide the contact portion which exhibits low friction and high resistance to wear as taught by Haines.

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15. Claims 5 & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Hoffmann, Freeman, Shurts, Chocholek, Asher, Mangiavacchi and JP 63-89432 in view of Haines for the same reasons noted immediately

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 10:30 am to 8:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/
Primary Examiner, Art Unit 3679